What is claimed is:

    1.   A resin composition comprising:

    a polyethylene resin (A) in an amount of 100 parts by weight; and

    a long-chain branched ethylene/α-olefin random copolymer (B) comprising ethylene and an α-olefin having 3 to 20 carbon atoms in an amount of 0.5 to 5000 parts by weight,

    wherein the polyethylene resin (A) has:

(a) a melt flow rate (MFR, ASTM D 1238, 190°C, a load of 2.16kg) of 0.01 to 150 g/10 min; and

(b) a density of 0.901 to 0.970 g/cm^3, and

    wherein the ethylene/α-olefin random copolymer (B) has:

(a) a density of not more than 0.900 g/cm^3;

(b) an intrinsic viscosity (η), as measured in decalin at 135°C, of 0.3 to 3.0 dl/g;

(c) a glass transition temperature (Tg) of not more than -50°C;

(d) a crystallinity, as measured by X-ray diffractometry, of less than 40%;

(e) a molecular weight distribution (Mw/Mn), as measured by GPC, of not more than 3.0;

(f) a B value, as determined by ^{13}C-NMR spectrum and the following equation, of 1.0 to 1.4; and

(g) a ratio gη* of the intrinsic viscosity (η) determined in the property (b) to the intrinsic viscosity (η)blank of a linear ethylene-propylene copolymer having the same weight-

average molecular weight (measured by a light scattering

method) as the copolymer rubber (B) and having an ethylene

content of 70 % by mol, $(\eta)/(\eta)_{blank}$, of 0.2 to 0.95,

$$B\ value = (P_{OE})/(2 \cdot (P_E) \cdot (P_O))$$

5   wherein (P_E) and (P_O) are respectively a molar fraction of

the units derived from ethylene and a molar fraction of the

units derived from the α-olefin in the copolymer rubber

(B), and (P_{OE}) is a proportion of the number of the α-

olefin/ethylene sequences to the number of all the dyad

10   sequences.

    2.   A soft resin composition comprising:

    a polyethylene resin (A-X) in an amount of 100 parts

by weight; and

15   a long-chain branched ethylene/α-olefin random

copolymer (B-Y) comprising ethylene and an α-olefin having

3 to 20 carbon atoms in an amount of 50 to 5000 parts by

weight,

    wherein the polyethylene resin (A-X) has:

20   (a) a melt flow rate (MFR, ASTM D 1238, 190°C, a load of

2.16kg) of 3 to 150 g/10 min; and

(b) a density of 0.901 to 0.970 g/cm^3, and

    wherein the ethylene/α-olefin random copolymer (B-Y)

has:

25   (a) a density of not more than 0.900 g/cm^3;

(b) an intrinsic viscosity (η), as measured in decalin at

135°C, of 0.3 to 3.0 dl/g;

(c) a glass transition temperature (Tg) of not more than -50°C;

(d) a crystallinity, as measured by X-ray diffractometry, of less than 40%;

5 (e) a molecular weight distribution (Mw/Mn), as measured by GPC, of not more than 3.0;

(f) a B value, as determined by ^{13}C-NMR spectrum and the above equation, of 1.0 to 1.4; and

(g) a ratio gη* of the intrinsic viscosity (η) of said 10 copolymer rubber (B) determined in the property (b) to the intrinsic viscosity (η)$_{blank}$ of a linear ethylene-propylene copolymer having the same weight-average molecular weight (measured by a light scattering method) as the copolymer rubber (B) and having an ethylene content of 70 % by mol, 15 (η)/(η)$_{blank}$, of 0.2 to 0.95.

3. An ethylene/α-olefin copolymer resin composition comprising:

a polyethylene resin (A-α) in an amount of 100 parts 20 by weight; and

a long-chain branched ethylene/α-olefin random copolymer (B-α) in an amount of 5 to 67 parts by weight,

wherein the polyethylene resin (A-α) is a linear ethylene/α-olefin copolymer (A-0) comprising ethylene and 25 α-olefin having 4 to 20 carbon atoms and has:

(a) a density of 0.901 to 0.940 g/cm^3; and

(b) a melt flow rate (MFR) of 0.01 to 20 g/10 min, and

wherein the long-chain branched ethylene/α-olefin random copolymer (B-α) has:

(a) a density of 0.860 to 0.900 g/cm³;

(b) a melt flow rate (MFR) of 0.01 to 20 g/10 min;

5 (c) an intrinsic viscosity (η), as measured in decalin at 135°C, of 0.3 to 3.0 dl/g;

(d) a glass transition temperature (Tg) of not more than -50°C;

(e) a crystallinity, as measured by X-ray diffractometry,

10 of less than 40%;

(f) a molecular weight distribution (Mw/Mn), as measured by GPC, of not more than 3.0;

(g) a B value, as determined by ^{13}C-NMR spectrum and the above equation, of 1.0 to 1.4; and

15 (h) a ratio gη* of the intrinsic viscosity (η) determined in the property (c) to the intrinsic viscosity (η)blank of a linear ethylene-propylene copolymer having the same weight-average molecular weight (measured by a light scattering method) as the copolymer rubber (B) and having an ethylene

20 content of 70 % by mol, (η)/(η)blank, of 0.2 to 0.95.

4. The resin composition as claimed in any one of claims 1 to 3, wherein the ethylene/α-olefin random copolymer is a ethylene/α-olefin random copolymer prepared

25 by randomly copolymerizing ethylene and an α-olefin having 3 to 20 carbon atoms in the presence of a metallocene

catalyst comprising a metallocene compound represented by the following formula (I):
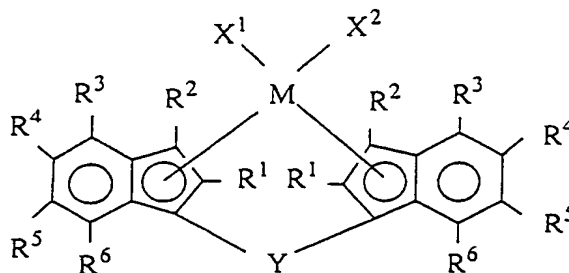
... (I)

5   wherein M is a transition meta of Group IVB of the periodic table,

R^1 is a hydrocarbon group having 1 to 6 carbon atoms;

R^2, R^4, R^5 and R^6 may be identical with or different from each other and are each hydrogen or a halogen atom, or

10   a hydrocarbon group of 1 to 6 carbon atoms,

R^3 is an aryl group of 6 to 16 carbon atoms which may be substituted with a halogen atom, a hydrocarbon group of 1 to 20 carbon atoms or an organic silyl group,

X^1 and X^2 are each independently hydrogen or a halogen

15   atom, or a hydrocarbon group of 1 to 20 carbon atoms, a halogenated hydrocarbon group of 1 to 20 carbon atoms, an oxygen-containing group or a sulfur-containing group, and

Y is a divalent hydrocarbon group of 1 to 20 carbon atoms, a divalent halogenated hydrocarbon group of 1 to 20

20   carbon atoms, a divalent silicon-containing group, a divalent germanium-containing group, a divalent tin-containing group, $-O-$, $-CO-$, $-S-$, $-SO-$, $-SO_2-$, $-NR^7-$, $-P(R^7)-$, $-P(O)(R^7)-$, $-BR^7-$ or $-AlR^7-$ (in the formulae, the R^7 is hydrogen or a halogen atom, or a hydrocarbon group of

1 to 20 carbon atoms or a halogenated hydrocarbon group of
1 to 20 carbon atoms).

5. A film made from the resin composition as claimed
5 in claim 3 or 4.

6. The film as claimed in claim 5, which is produced
by inflation molding.

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